

should be arranged on the same plan as the waterclosets—they should be separated from the ward by a passage, and have cross-ventilation.

294. *Mr. Solomon.*] And the lavatories?—In the same way. There are the same bad effects from steam and hot water. These lavatories also open to the drains, and there is danger of sewer-gas arising from them—at least, I should think so.

295. What is the proportion of waterclosets to a ward?—I have not inquired into that, but Wilson gives one watercloset to every ten beds, besides advising urinals. There are no urinals in our Hospital, which accounts for the uriniferous smell which I found in the watercloset.

296. The next subject is kitchens. Are there any kitchens connected with the wards in this Hospital?—No.

297. *The Chairman.*] Is that proper?—No. In all well-constructed hospitals there should be some arrangement for warming food.

298. What have you to do in this Hospital?—The nurse lives in the ward. She goes into a little room outside, and has the food warmed there.

299. And that, you say, is not proper?—It is not proper.

300. The last objection you take is to the absence of special wards for special cases?—Yes.

301. In the first place, we will subdivide that into (1) special wards for special kinds of cases, and (2) special wards for special cases. First, let me ask you, in the case of a gynecological surgical case, is there not any additional risk of septic poisoning to what there is in an ordinary surgical case?—Undoubtedly there is a very great extra risk.

302. By that you mean through the absence of classification of diseases, and having no wards for each?—Yes.

303. *Mr. Solomon.*] Tell us what the additional risk is?—First of all, you have to deal with a canal which opens directly into the general peritoneal cavity. That is one form of risk, and if mischief does arise it is sure to be very serious. Then, it is perfectly well recognised that we have to deal with highly vascular tissues. The vagina and the lower part of the passage are highly vascular, and the veins form plexuses. Then, you have the condition of the lining of the uterus itself. We are there dealing with a highly absorbent surface, which is described recently as a lymphoid or glandular surface. Then, there is a risk in connection with mere vaginal examinations. Practically, I knew that a risk existed, though I did not know the scientific explanation. Our pathologist, Dr. Roberts, says that it is a very important risk, and as far as I know it has not previously been specially drawn attention to. During vaginal examination by speculum or otherwise air enters the passage. If this air is loaded with pathogenic germs a certain portion are left behind, which are then under very favourable conditions for development. In the vagina—a moist, warm passage—you have the conditions recognised as most favourable for germ-cultivation. This explanation of the danger has, so far as I know, never been made before. I think, practically it is recognised, but scientifically this explanation has never been offered. It is a point that may have an important bearing in this inquiry.

304. Is Dr. Roberts pathologist to the University?—Yes.

305. Suppose that germs gain access to the vagina in the way you have stated, is there anything to prevent them, in the ordinary course, from spreading to the uterus, thence to the fallopian tubes, and to the peritoneal cavity?—No, they would not thus spread in the ordinary course of events. It is a very fine point indeed. Some authorities do say that you may get a lodgment of germs in the folds of the mucous membrane; that these germs multiply, and during this process destroy the surface protective layer, and finally actually find an entrance into the system. In this way mischief may arise without a mechanical breach of surface. In that way absorption may occur; but what is probably far more common is that during an examination some slight injury of the protecting layer occurs, and affords a surface for the entry of germs. Such injuries are apt to occur from the introduction of the speculum or sound.

306. *The Chairman.*] It is not necessary for the absorption of germs that they should pass up the uterus?—No. Local injury may afford a focus of absorption.

307. *Mr. Solomon.*] May I take it that there are two particular dangers to be apprehended in regard to gynecological cases—that, in the first place, the parts are particularly apt to encourage these germs or organisms?—Yes.

308. And that, if they are encouraged, there is special danger arising to the patient?—That is anticipated, as I have explained.

309. Do you think it safe to have these cases in ordinary surgical wards? But I would first ask you is it not a usual thing to find suppurating wounds in these wards?—I believe there are always some—always one or more suppurating wounds there.

310. Is there anything given off from these wounds?—Yes. It is from suppurating wounds especially that these microbe organisms, which, spreading, cause septic trouble, are given off.

311. And they produce septicæmia and pyæmia, do they not?—They may produce septicæmia and pyæmia.

312. Do you think, under these circumstances, that it is safe that female patients, who are under the care of a gynecologist, should be treated in a general surgical ward?—Certainly not; especially if you do not know the nature of the cases in the ward.

313. On this point also I want to know, is the gynecological portion of the Dunedin Hospital under your care?—It is.

314. Your patients are in a general surgical ward, are they not?—They are in an ordinary surgical ward.

315. *The Chairman.*] Do you know if they have special wards in other hospitals?—I do not know what the arrangements of other hospitals in the colony are, but I know that at Home it is now the case. Most hospitals there have special wards for these cases. In some of the large cities at Home there are special hospitals for these cases. In Melbourne they have a